SECTOR 2

SOUTH COAST OF ENGLAND—START POINT TO SELSEY BILL

Plan.—This sector describes the S coast of England from Start Point to Selsey Bill, including the Isle of Wight and The Solent. The descriptive sequence is W to E.

General Remarks

2.1 From Start Point to the Bill of Portland, 50 miles NE, the coast curves inward in a broad sweep, the N portion of which is Lyme Bay. Between the Bill of Portland and Saint Catherine's Point, at the S end of the Isle of Wight, the coast is divided into two bays by the Isle of Purbeck.

The Isle of Purbeck is a peninsula, the S extremity of which is formed by Saint Alban's Head. The Solent lies between the Isle of Wight and the mainland. This stretch of water provides access to the ports of Southampton and Portsmouth. Selsey Bill is located 11 miles E of the E end of the Isle of Wight.

Winds—Weather.—From Start Point to the Bill of Portland, the ports of Dartmouth, Torquay, and Brixham offer the only shelter in S and SE gales.

During such storms the sea breaks right across the entrances of the small ports along this part of the coastal stretch.

Tides—Currents.—The tidal currents are fairly strong off Start Point, and very strong off Bill of Portland. In the W part of the bay between the two points the current is weak, but becomes much stronger towards Portland Peninsula.

Midway between the two points the current attains a maximum spring rate of 1.5 knots. The currents in the bays on either side of the Bill of Portland form strong eddies. There is a N set into either bay, and a S set, S of Bill of Portland. The current maybe felt 8 to 10 miles W and E, and 5 to 6 miles S of the peninsula.

Vessels are advised to keep well S of the Bill of Portland to avoid the currents.

Pilotage.—Deep-sea pilots may be embarked off Brixham. **Regulations.**—See Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and the Mediterranean Sea for information pertaining to vessels sailing within the waters of the United Kingdom.

Note.—For information concerning the offshore route along this stretch of the English Channel, including reporting systems and regulations, see paragraph 4.1.

Start Point to Lyme Bay

2.2 Start Point (50°13'N., 3°38'W.), the W entrance point of Start Bay, may be identified by its rugged and serrated appearance. It is radar conspicuous. A main light is shown from a prominent round tower, 28m high, standing near the extremity of the point. Within 1 mile of the point the land rises rapidly to a height of about 120m. Two conspicuous radio masts stand on the heights, about 1 mile WNW of the point.

Tide rips occur up to 1 mile S and E of the point.

Skerries Bank (50°15'N., 3°36'W.), with a least depth of 2.1m, extends between 0.7 mile and 4 miles NE of Start Point.



Start Point Light

Its northeasternmost and outer extremity is marked by a buoy. During heavy weather the sea breaks on all parts of this bank, especially on the SW end. A narrow passage leads between the S end of the bank and Start Point. It should not be used during periods of heavy weather.

Start Bay lies between Start Point and Combe Point, 7 miles NNE. The bay, within Skerries Bank, provides good anchorage, in depths of 12 to 14m, sand and gravel. Anchorage is not recommended in the bay during SE gales or within 0.5 mile N of Start Point. In strong E winds there is no shelter between the bank and the land, and broken water extends to the shoreline.

2.3 Dartmouth Harbour (50°21'N., 3°35'W.) (World Port Index No. 35390) lies at the mouth of the River Dart. It is entered between Combe Point and Inner Froward Point, 1 mile ENE. The town of Dartmouth is situated on the W bank, about 0.5 mile above the entrance. The smaller town of Kingswear stands on the E side of the river. Britannia Royal Naval College stands on high ground at the N side of Dartmouth.

The harbor is reported (1999) to be seldom used as a commercial port. It is used mainly by pleasure craft, fishing craft, and yachts.

Tides—Currents.—Tides rise about 4.9m at MHWS and 3.8m at MHWN.

Depths—Limitations.—The harbor is capable of accommodating vessels up to 10,000 tons, 183m in length, and 8.2m draft. The controlling depth on the entrance range is 7.9m. It is presently used mainly by yachts and pleasure craft.

Sandquay Jetty fronts the town. It has a depth of 7.5m along-side and can accommodate vessels up to 100m in length.

Several mooring buoys, which can be used by vessels up to 10,000 tons, are situated in the harbor.

A bar, with depths of less than 5m, crosses the river about 0.7 mile above Dartmouth. Totnes, situated about 10 miles

above Dartmouth, is accessible to small vessels up to 75m in length with drafts up to 3.6m at springs and 2.5m at neaps.

The entrance fairway is about 185m wide between the dangers. Abreast the town it is about 140m wide between the 5m depth contours, having depths of 6 to 8m.

Aspect.—Dartmouth Castle and Saint Petrox Church, joined together, stand out in bold relief on Castle Point, on the W side of the harbor entrance.

A directional sector light indicates the entrance fairway.

Pilotage.—The area lying between the river entrance and Totnes is divided into two pilotage zones. The Outer Zone extends from the entrance to Anchor Stone. The Inner Zone extends from Anchor Stone to Totnes.

Pilotage in the Outer Zone is compulsory for the following vessels:

- 1. Vessels of 20m and over in length carrying any passengers or carrying dangerous goods in bulk (including non-gas free tankers).
- 2. Towing vessels and tows, with a combined length of 50m and over, where the towing vessel or one or more of the vessels in the tow is 20m or over in length.
- 3. All other vessels of 50m and over in length. Pilotage in the Inner Zone is compulsory for the following

vessels:

- 1. Fishing vessels of 47.5m and over in length.
- 2. Towing vessels and tows, with a combined length of 20m and over, where the towing vessel or one or more of the vessels in the tow is 20m or over in length.
 - 3. All other vessels of 30m and over in length.

The harbor office (call sign DartNav) operating hours are given in the accompanying table.

Dartmouth Harbor Office Hours				
Day	Summer hours	Winter hours		
Monday	0900 to 1700	0900 to 1700		
Tuesday	0900 to 1700	0900 to 1700		
Wednesday	0900 to 1700	0900 to 1700		
Thursday	0900 to 1800	0900 to 1700		
Friday	0900 to 1600	0900 to 1600		
Saturday	0900 to 1200	Closed		

Vessels are required to notify the harbor office 1 working day in advance if they require a pilot or will be arriving outside office hours. Vessels must then send a confirmation 30 minutes prior to arrival. Shorter notices can be accepted depending on the availability of a pilot, boat crew, linesmen, and port control staff. Information is required as soon as practicable if the ETA changes by more than 1 hour.

Vessels are required to notify the harbor office as early as possible, in any event prior to entering, if they do not require a pilot and will be arriving within office hours.

Vessels should request a pilot through the harbor office or their agent. They should also provide their draft, length, type and quantity of cargo, type and quantity of bunkers, and number of passengers.

The harbor office (pilots) can be contacted on VHF channel 11 and board in the entrance.

The harbor office can be contacted by e-mail at the following web address:

dhna@dartharbour.org.uk

Caution.—There is a speed limit of 6 knots in the harbor. Submarine cables cross the river in the area between Kingswear and Sandquay Jetty.

Ferries run between Dartmouth and Kingswear.

Marker buoys for yacht races may be moored in the approaches during spring and summer.

Tor Bay

Berry Head (50°14'N., 3°29'W.) is the NE extremity of the broad rocky peninsula formed between the River Dart and Tor Bay. It consists of a steep-to limestone cliff, which rises from the sea nearly perpendicular to a height of 55m. A main light is shown from a structure, 5m high, standing on the flat top of this headland.

Seen from the SE, the head forms an excellent landmark because of the whitish appearance of the cliffs in relation to the surrounding land. Berry Head is reported to be very radar conspicuous.

Numerous steep-to dangers lie up to 0.5 mile offshore along the coast between the River Dart and Berry Head. Vessels approaching Tor Bay from the S should give the shore a wide

Tor Bay, entered between Berry Head and Hope's Nose, about 4 miles N, affords good shelter in W winds, but E or SE gales send in a heavy dangerous sea. Vessels entering the bay should avoid The Ridge, a shoal area with depths of 6 to 7m, lying in the SW part of the bay.

Hope's Nose (50°27'N., 3°29'W.), the N entrance point of Tor Bay, is a sloping headland rising to a knoll 105m high about 0.5 mile inland.

Ore Stone, a conspicuous peaked rock lies about 0.5 mile SE of the point. It is 32m high and forms a good mark especially from the S. Thatcher Rock, 41m high, lies about 0.8 mile W of Ore Stone. It is conspicuous and more rounded than Ore Stone. On some bearings these two rocks could be mistaken for one another.

A conspicuous white block of flats stands on the N side of the bay, 0.7 mile WSW of Hope's Nose. A prominent hotel is situated about 0.5 mile W of this block.

Two prominent radio masts stand at the W side of the bay, about 5 miles WSW of Hope's Nose.

Torbay Harbour is the local name used to include Tor Bay and the harbors of Brixham, Paignton, and Torquay.

Pilotage.—Pilotage is compulsory within the Torbay Harbour limits for vessels 36m in length and over or 75 nrt and

Pilots board vessels bound for Brixham, Torquay, and Tor Bay Anchorage in position 50°25.0'N, 3°25.6'W.

Vessels should send an ETA and a request for pilotage 48 hours in advance to the pilot station (Dencade Brixham). Vessels should then contact the pilot on VHF channel 9 at least 2 hours prior to arrival.

The station also provides deep-sea pilots for the English Channel and North Sea. Deep-sea pilots board vessels with drafts over 18m about 4 miles E of Berry Head. Other vessels are boarded in position 50°25.0'N, 3°25.6'W. Vessels should send an ETA and a request for deep-sea pilotage 48 hours in advance to the pilot station (Dencade Brixham). Vessels should then contact the pilot on VHF channel 9 at least 2 hours prior to arrival.

The pilot station at Brixham can be contacted by e-mail at the following web address:

ops@tbsa.co.uk

2.5 Brixham Harbour (50°24'N., 3°31'W.) is situated on the S side of Tor Bay and consists of an outer and an inner harbor, protected by a breakwater. It has depths of 3 to 6m and extensive facilities for fishing vessels and yachts. The jetty berth, on the inner side of the seaward end of the breakwater, is 137m long and has a least depth of 5.1m alongside. It can accommodate vessels up to 150m in length. The harbor is no longer used for commercial shipping.

Paignton (50°26'N., 3°33'W.), an extensive resort town, occupies a large area on the W side of Tor Bay and is fronted by sandy beaches. The small harbor is formed by two jetties and is used by pleasure craft. A conspicuous promenade pier stands close N of the harbor.

2.6 Torquay Harbour (50°28'N., 3°32'W.) (World Port Index No. 35410) is situated on the NW shore of Tor Bay and is protected by two breakwaters piers forming an entrance, 50m wide. The harbor consists of an outer basin, an inner basin, and an extensive yacht marina. The resort town is situated at the meeting of two deep valleys and several prominent buildings stand in it.

Princess Pier has berths on both sides with a depth of 3.9m alongside its head. Haldon Pier has a depth of 3.9m alongside and is used for cargo operations. It can accommodate vessels up to 90m in length and 3.6m draft.

There is a regular cargo ferry service between Torquay and the Channel Islands. The port operates commercially throughout the year, but such operations are limited during the summer months when the harbor becomes a yachting center.

Anchorage.—Almost all of Tor Bay, except in the vicinity of The Ridge, affords good anchorage, in depths of about 11m, mud and clay, sheltered from W winds.

Torquay Roads, S of the harbor entrance, has depths of 8 to 11m, sand and shells. Although the holding ground is good, this anchorage is open to the SE and should not be used during strong winds from that direction.

Paignton Roads, at the W side of the bay, affords anchorage, in depths of 5 to 10m.

Brixham Roads affords anchorage N or E of the harbor breakwater, in depths of 8 to 9m. However, areas lying up to about 1 mile NE and 0.4 mile NNE of the breakwater were reported (1995/97) to be fouled by wires.

An anchorage area designated for deep-draft vessels, which may best be seen on the chart, lies centered about 4 miles NE of Berry Head.

2.7 Teignmouth Harbour (50°33'N., 3°30'W.) (World Port Index No. 35415) is situated at the mouth of the River Teign, 4.5 miles N of Hope's Nose. It can be identified by The Ness, a bold headland of red sandstone, located on the S side of the entrance.

The town, situated on the N side of the entrance, is a tourist resort. It is situated mainly on a small peninsula, which is fronted by a sandy spit at its S end. St. Michaels Church, with a tower and flagstaff, stands in the NE part of the town and is conspicuous from the approaches.

The coast between Teignmouth and Exmouth, about 5 miles NE, is bordered by low sandstone cliffs and numerous rocks.

The bar at the entrance of the river has a least depth of 0.3m, but has a tendency to shift and requires local knowledge. Tides rise about 5m at HWS and 3.7m at HWN.

Numerous drying banks lie in the vicinity of the entrance channel including East Pole Sand, which dries up to 0.6m. Due to the shifting nature of the fairway, local knowledge is required.

The harbor is used by coasters, pleasure craft, and yachts. It has three main quays, 117 to 140m long, which provide five berths, with depths of 1.6 to 2m alongside. There are facilities for bulk and ro-ro vessels. Vessels up to 3,500 dwt, 119m in length, and 5.2m draft can be accommodated at HW. Vessels should contact the local authorities to ascertain the latest information concerning the maximum draft allowed.

Pilotage.—Pilotage is compulsory. Vessels should send a request for pilotage and an ETA at least 12 hours in advance. The message should also state the vessel's length and exact draft. Pilots may be contacted on VHF channel 16 or 12 and board about 1 mile SE of The Ness.

The port may be contacted by e-mail at the following web address:

teignmouth@abports.co.uk

Caution.—An outfall pipeline extends about 1.2 miles ESE from The Ness. Diffusers are situated at the seaward end and are marked by a lighted buoy.

2.8 Exmouth Harbour (50°37'N., 3°25'W.) (World Port Index No. 35420) lies in a coastal bight between Langstone Point and Straight Point, about 3 miles NE. The town fronts the shore on the E side of the entrance to the River Exe. It is approached through a narrow channel, which is fronted by a bar with a least depth of 0.3m. Numerous drying shoals and sand banks obstruct the entrance. The channel, which is subject to frequent change, is buoyed and lies close to the N shore.

The harbor is only used by small craft and is closed to commercial shipping. Prior to closure, vessels up to 3,200 dwt, 88m in length, and 5.1m draft could be handled at HWS.

The river leads to the entrance of the Exeter Canal, 3 miles above the town. The canal is 5 miles long and is entered through a lock. It can be used by small craft up to 350 tons, 37m in length, 7.9m beam, 11m vertical clearance, and 3m draft.

Holy Trinity Church, with a tower and flagstaff, and the Catholic Church, with a green spire, stand in the W part of the town and are prominent.

Caution.—Dawlish Rock, with a least depth of 2.1m, lies about 0.5 mile E of the town of Dawlish, 0.8 mile SSW of Langstone Point. An outfall pipeline extends from the shore in the vicinity of this rock.

Lyme Bay

2.9 Lyme Bay lies between Straight Point and Bill of Portland, 35 miles E. The coastline of the bay curves inward in a broad sweep.

Straight Point (50°36'N., 3°21'W.), the W entrance point, is formed of earth cliffs and is radar prominent. A light is shown from a mast, 7m high, standing on the point. It is reported that this light structure is difficult to identify.

The coast then trends 2 miles NE to Otterton Point. The River Otter empties into the sea close W of this point through a mouth obstructed by a shingle bar. Budleigh Salterton, a resort, is situated close W of the river mouth in a narrow valley. Sidmouth, another resort, is situated 4 miles NE of Otterton Point in a valley between two hills. It is fronted by two offshore rock breakwaters.

Beer Head (50°41'N., 3°06'W.), a conspicuous and precipitous chalk cliff, is located about 9 miles ENE of Otterton Point. This headland is 130m high and forms the W end of the white chalk-colored cliffs that extend around the S and E coasts of England. The cliffs extending to the W of the point consist of red sandstone.

A conspicuous radio mast stands at an elevation of 445m on Stockland Hill, 7 miles N of Beer Head.

Beer Roads, a small anchorage, fronts the village of Beer, 0.7 mile NNE of Beer Head. A recommended berth, sheltered from N winds, lies about 0.4 mile SE of the village, in a depth of 8m, sand. A prominent water tower stands 1.2 miles NNE of the village.

Caution.—A firing range area, marked by two lighted buoys, extends up to 1.5 miles E of Straight Point and may best be seen on the chart. Red flags are displayed when the rifle range is in use.

Crab pots are often laid from 2 to 4 miles offshore close E of Beer Head.

2.10 Lyme Regis Harbour (50°43'N., 2°56'W.) (World Port Index No. 35430) lies 6.5 miles ENE of Beer Head and is used by fishing boats and pleasure craft. The harbor is protected from SW by The Cobb, a sizable stone pier. The harbor basin has depths of 2.7 to 4.3m at HWS, but dries at LWS. A lighted range indicates the approach to the harbor. During strong S winds, the sea breaks heavily around the piers. Fishing boats up to 11m in length and 1.9m draft can be accommodated.

The coast trends E from Lyme Regis and remains cliffy except near the mouth of the River Char, 1.8 miles ENE of the harbor. Golden Cap, where the cliffs rise to a height of 187m, is located 3.5 miles E of Lyme Regis. This cape is fringed by several shoals which extend up to 0.5 mile seaward.

High Ground and Pollock, two shoal areas with depths of 3 to 4m, lie up to 1 mile offshore, 1.8 and 2.6 miles SE of Golden Cape. These dangers should be given a wide berth.

Bridport Harbour (50°43'N., 2°46'W.) (World Port Index No. 35440) lies 3 miles ESE of Golden Cap and is known

locally as West Bay. The town is situated 1.4 miles N of the harbor. This harbor is used by small commercial vessels, fishing boats, and pleasure craft. It has a canal-type entrance, about 200m long and 12m wide, formed by two piers. A basin, 160m long and 42m wide, lies at the N end of the entrance channel and mostly dries. The entrance is fronted by a bar which dries. There are two berths with depths up to 3.5m alongside. Small vessels up to 50m in length and 3.2m draft can be accommodated.

Pilotage is compulsory for vessels of 50 tons and over. Vessels should send an ETA and request for pilotage through the agent at least 24 hours in advance, confirming 6 hours prior to arrival. Pilots can be contacted by VHF and board about 1 mile from the harbor entrance. During S gales, the sea breaks heavily at the entrance and renders the harbor unusable.

An outfall pipeline extends about 0.8 mile SSW from close E of the harbor entrance. It is marked by a lighted buoy at the seaward end.

From Bridport to the N end of the Portland Peninsula, 15 miles SE, the coast is almost straight. The SE part of this stretch is formed by Chesil Beach. This beach consists of a steep-to narrow isthmus of shingle, about 200m wide and 13m high. Lagoons lie between the inner side of this isthmus and the land. After continuous strong SW winds, the sea breaks over the SE portion of the beach and floods the land.

Caution.—An outfall pipeline extends about 0.7 mile S from the mouth of the River Char. It is marked by a lighted buoy at the seaward end.

An outfall pipeline extends about 0.8 mile SSW from close E of Bridport Harbour entrance. It is marked by a lighted buoy at the seaward end.

Liquid cargo transfer takes place regularly in Lyme Bay, about 5 miles offshore, E of Tor Bay, S of Beer Head, S of Bridport, and off Chesil Beach. Tankers involved in the transfer may be at anchor and unable to maneuver.

It has been reported that vessels anchored in Lyme Bay awaiting berthing instructions must anchor beyond the 3-mile limit, and as far away from land as is possible. Tankers requiring urgent or necessary shore facilities can anchor NE of Hope's Nose on the 3-mile limit, but not off Tor Bay.

An area in which vessels are warned against anchoring, sweeping, and trawling, due to the existence of cables and buoys, extends 3 miles SSW from the shore 4 miles SE of Bridport. The seaward boundaries of the zone are marked by two buoys and the shore boundaries are each marked by a beacon. The area described above is best seen on the chart.

A submarine exercise area is centered 5 miles SW of the Portland Peninsula. Vessels should keep a good lookout when passing through these waters.

Portland Peninsula

2.11 Bill of Portland (50°31'N., 2°27'W.), the S extremity of Portland Peninsula (Isle of Portland), is a low extended point. A main light is shown from a conspicuous tower, 41m high, standing on the SE side of the Bill.

A stone beacon stands at an elevation of 18m on the S extremity of the shore and is meant to warn small vessels of a rock shelf with several loose boulders which fronts the point. The prominent structure of a former light (Old Low Light) is



Portland Bill Light

situated 0.4 mile NNE of the main light. A conspicuous coast guard station stands on The Grove at the E side of the peninsula, 2.5 miles NE of the main light.

The Verne, a hill, is situated close to the N end of the peninsula. It is 149m high and precipitous on its N side. A conspicuous radar dome (red light) is situated on this hill. A prominent radio mast stands at an elevation of 158m about 0.3 mile SSE of the hill.

The land between this hill and the Bill, about 3 miles S, forms a conspicuous wedge-shaped landmark and is one of the best aids to navigation for vessels proceeding up and down the English Channel. The Bill of Portland is radar conspicuous.

Anchorage.—West Bay, lying on the W side of Portland Peninsula, is sheltered from nearly all E winds and affords anchorage nearly anywhere. The roadstead has depths of 25 to 30m, loose gravel and shells. However, the holding ground is poor. If a sudden, but not uncommon, shift of wind to the W takes place, the sea quickly rises and vessels should immediately vacate the anchorage.

Directions.—The offshore passage leads from S of the Bill of Portland ENE for 45 miles to S of St. Catherine's Point, the S extremity of the Isle of Wight.

Vessels proceeding to Portland or Weymouth may pass between the Bill and The Shambles or E of The Shambles.

Caution.—A tidal race, caused by the very strong S currents from both sides of Portland Peninsula meeting the E and W currents off the Bill, is formed from 1 to 2 miles S of the point with the strongest part of the race in the direction of the main current.

Though the currents run very fast in the immediate vicinity of the race, they are not especially strong within the race itself, but are subject to great and sudden changes in both direction and rate. In heavy weather, especially when the wind is blowing against the current, strong overfalls and breaking seas are formed and may be dangerous to boats and small vessels.

At certain times, currents greater than those indicated on the charts, possibly up to 10 knots, may be found in or near the race and care is advised.

2.12 The Shambles (50°30'N., 2°22'W.), a bank of broken shells with depths of 5 to 8m, lies centered about 3 miles ESE of the Bill of Portland. It may best be seen on the chart and is reported to be extending farther to the E. Except at slack water, the position of this bank is clearly shown by ripples or overfalls

on the N or S side according to the direction of the tidal flow. Lighted buoys are moored off the E and W ends of this bank. However, these navigational aids should not be wholly relied upon, especially after stormy weather when the sea breaks heavily over the bank.

Caution.—Although the channel lying between The Shambles and the Bill of Portland can be used at any time, it is only recommended in good weather and with local knowledge.

All vessels not familiar with the area should pass E of The Shambles and W of Adamant Shoal when proceeding to Portland. Due regard should be allowed for the tidal current when transiting this area.

Portland Harbour (50°35'N., 2°26'W.)

World Port Index No. 35450

2.13 Portland Harbour, a former naval base, is situated at the N end of Portland Peninsula and affords shelter to deepdraft vessels in all weather. The harbor is protected by four breakwaters that form three entrances. The southernmost entrance is obstructed by a wreck and overhead cables.

Winds—Weather.—Although winds are variable in this area, the sea breeze effect results in a strong tendency for winds from the N to veer toward E and those from the W to back toward the SW, especially in the morning.

The fluctuation of land and sea breeze at Portland is sometimes NE to SW, usually blowing parallel to the coast.

During strong winds or gales, the harbor area, although protected from swell, is subject to a choppy sea and dangerous for boats.

Tides—Currents.—Tides rise about 2.1m at springs and 1.4m at neaps. The tidal currents in the harbor entrances attain a velocity of 1 knot at spring tides and are irregular. Inside the harbor the tidal currents are uncertain.

Depths—Limitations.—After clearing The Shambles the approaches are deep and only the testing facilities (Noise Range) SE of the harbor must be avoided. The harbor may be entered either by East Ship Channel, which has a least depth of 13.8m decreasing to 12.5m within the entrance, or by North Ship Channel which has a depth of 12.4m.

Within the breakwaters the mooring berths in the E part of the harbor have a least depth of 11m.

The main berthing facilities are listed in the accompanying table.

Portland Berth Information					
Berth	Depth	Length			
Queens Pier	8.3m	600m			
Inner Breakwater	15.0m	230m			
Inner Coaling Pier	7.7m	250m			
Outer Coaling Pier	9.5m	250m			
Deep Water Jetty	11.6m	250m			
Q Pier	7.6m	250m			
Loading Jetty	7.0m	340m			

There are facilities for general cargo, bulk, ro-ro, tankers, and passenger vessels. Vessels up to 250m in length and 11m draft can be accommodated.

Aspect.—The Inner Harbour is protected by breakwaters which are 4m above HW. Inner Breakwater projects about 0.3 mile ENE from the NE side of Portland Peninsula. Outer Breakwater is separated from the N end of Inner Breakwater by South Ship Channel (closed). It curves in a N direction and is about 1 mile long. Fort Head is situated at its N end. Its S end is designated as "D" Head.

Northern Arm extends about 0.7 mile ESE from the shore. Its SE end is designated as "C" Head. North-eastern Breakwater, 0.7 mile long, lies between Northern Arm and Outer Breakwater. Its N end is designated as "B" Head and its S end is designated as "A" Head.

East Ship Channel leads between Fort Head and "A" Head. North Ship Channel leads between "B" Head and "C" Head.

Several prominent buildings on Torpedo Pier and an aluminum chimney stand near the root of Northerm Arm. A conspicuous television mast stands about 1 mile W of the root of Northern Arm. A prominent crane is situated on Inner Breakwater.

A main light is shown from a prominent metal tower, 22m high, standing on "A" Head.

Pilotage.—A joint pilotage area for Portland and Weymouth has been established W of a line joining Grove Point (50°32.9'N., 2°24.6'W.) and White Norte (50°37.5'N., 2°19.3'W.).

Within the Weymouth Pilotage Area (N of The Nothe) pilotage is compulsory for all vessels of 50m and over, all vessels over 36.6m in length carrying dangerous cargo, and all vessels carrying 12 passengers or more.

Regular ferries and those passing only within the pilotage area, HM Ships, Foreign and Commonwealth Naval vessels, and those vessels exempted by law are excluded.

Vessels should send an ETA and request for pilotage 24 hours in advance to Weymouth, confirming 2 hours prior to arrival.

Pilots generally board vessels bound for Weymouth in position 50°36.6'N, 2°23.0'W, about 2 miles NE of "A" Head.

Within the Portland Pilotage Area (S of The Nothe) pilotage is compulsory for all vessels of 50m and over, all vessels 20m in length and over carrying dangerous cargo, and all vessels 20m in length and over carrying more than 12 passengers.

Ministry of Defence vessels in the Outer Harbour and in the Inner Harbour N of a line between Lattice Tower and Beacon E, and any vessels transiting the Outer Harbour Area to or from Weymouth are exempt.

Vessels should send an ETA and request for pilotage 24 hours in advance to Portland, confirming 6 hours and 2 hours prior to arrival.

Pilots generally board vessels bound for Portland, as follows:

- 1. In position 50°35.0'N, 2°22.3'W (about 1.6 miles E of "A" Head) for vessels 180m in length and over.
- 2. In position 50°36.0'N, 2°24.0'W (about 1 mile NE of "A" Head) for vessels less than 180m in length.

Regulations.—There is a compulsory reporting system for all vessels over 50m in length (20m for vessels carrying

dangerous cargo) proceeding to or from Portland and Weymouth

All vessels are required to report to Portland on VHF channel 74, when passing the designated reporting points CF, CG, and CH listed below.

The report should include the vessel's name, position (reporting point designator), destination, ETA (inbound vessels), and intended route, E or W of The Shambles (outbound vessels, where appropriate).

In addition, vessels entering or leaving Portland Inner Harbour are required to report when passing the designated reporting points PE and PN as listed below.

Within 3 miles of "A" Head (50°35.1N., 2°24.9W.) all vessels are required to maintain a continuous listening watch on VHF channel 74.

Vessels bound for Weymouth should establish contact with Weymouth Harbour on VHF channel 12 before entering the area, and change to the Weymouth VHF working channel at the pilot boarding position.

The reporting points are, as follows:

- 1. CH—3 miles bearing 150° from "A" Head (inbound for the Noise Range buoys or between these buoys and the shore, also outbound either to the W or the E of The Shambles).
- 2. CG—3 miles bearing 125° from "A" Head (inbound or outbound E of The Shambles).
- 3. CF—3 miles E of "A" Head (vessels approaching Portland or Weymouth from the E, or proceeding E from either harbor).
- 4. PN—About 0.5 mile bearing 077° from "C" Head (vessels inbound and outbound from Portland Inner Harbor).
- 5. PE—About 0.5 mile bearing 043° from "A" Head (vessels inbound and outbound from Portland Inner Harbor).
- 6. WH—0.1 mile bearing 040° from Weymouth South Pier Light (outbound only).

Naval vessels within 3 miles of "A" Head should maintain a continuous listening watch on VHF channels 16 and 74; elsewhere, naval vessels should maintain a continuous listening watch on VHF channels 16 and 71.

Vessels carrying or loading/unloading dangerous substances at Weymouth should maintain a continuous listening watch on VHF channel 12.

Several prohibited anchorage areas, which may best be seen on the chart, lie in the approaches to Portland. Vessels must not attempt to anchor without instructions from the authorities.

Anchorage.—Anchorage outside the harbor is restricted by submarine cable areas and testing areas, which may best be seen on the chart. Vessels seeking shelter from W winds generally proceed to Weymouth Roads. Anchorage may be obtained at designated berths lying NE of Northeastern Breakwater, in depths of 12 to 18m.

There are numerous designated anchorages inside the harbor which are sheltered from the swell. The bottom of blue slimy mud provides good holding ground.

Caution.—Torpedo firing takes place periodically in a charted area E of Portland Harbour. When firing is underway, orange flags are displayed from the firing point on the NE breakwater and from safety craft as necessary.

Due to the naval facilities being moved from the harbor (1996), changes to buoyage, moorings, cable areas, etc., may be still be in progress.

Vessels should allow ample room for turning W to approach the entrances.

Eddies generally exist close to the breakwater heads and should be guarded against.

2.14 Weymouth Harbour (50°37'N., 2°27'W.) (World Port Index No. 35460), a small commercial port, is situated at the mouth of the River Wey in the SW part of Weymouth Bay.

Depths—Limitations.—The harbor, long and narrow, is entered between two stone piers. The entrance is 137m wide and provides a channel fairway, 76m wide. The controlling depth in the approach channel is 5.2m, shoaling to 3.2m within 60m of Town Bridge.

There is 360m of principal quayage providing three berths, with depths of 5.2m alongside. There are facilities for bulk, roro, and vehicle ferry vessels. Vessels up to 135m in length, 28m beam, and 5.2m draft can be accommodated at HW.

Town Bridge, a double bascule bridge, has an overhead clearance of 2.5m. It spans the harbor, 0.5 mile within the entrance, and blocks the channel to large vessels. A passage, 24.4m wide, leads through the bridge to an extensive marina. There are also facilities for fishing vessels and small craft.

Aspect.—Weymouth Bay lies between The Nothe, a bluff headland situated on the S side of the harbor, and Redcliff Point, 2 miles NE. A fort stands on the E end of The Nothe. Weymouth, a resort, is situated along the W side of the bay.

A lighted range indicates the approach channel. St. John's Church, with a conspicuous spire, stands near the shore of the bay. 0.6 mile NNW of the head of the N pier.

Pilotage.—For pilotage, reporting procedures, and regulations, see Portland Harbour in paragraph 2.13.

Anchorage.—Designated anchorages lie in depths of 9 to 18m, fine sand and shell, in the roadstead, NE of the harbor.

A refuge anchorage area, the limits of which may best be seen on the chart, lies centered about 2.3 miles ENE of the harbor. It has depths of 13 to 19m and is for the use of vessels seeking shelter during adverse weather. Vessels less than 150m in length are exempt from compulsory pilotage when arriving or leaving this anchorage area.

Caution.—The tidal currents in the bay are weak, but the rise and fall of the tide within the harbor is considerably affected by winds.

Two outfall pipelines extend up to 0.2 mile seaward from the S side of the S pier.

Weymouth Bay to Isle of Wight

2.15 Redcliff Point (50°38'N., 2°24'W.), on the N shore of Weymouth Bay, is the W extremity of a line of cliffs which extends E for about 3 miles to White Nothe. A conspicuous hotel, with a white tower, stands near the shore of the bay, 0.4 mile WNW of the point.

Two beacons, in line bearing 048°, stand on the high ground about 0.6 mile E of the White Nothe.

Adamant Shoal, with depths of 15.3 to 18m, lies about 4.8 miles S of White Nothe.

The coast E of White Nothe is strewn with rocks and ledges. It provides no shelter from S winds except at Lulworth Cove, 3 miles E. This small circular basin is encompassed by chalk cliffs and provides anchorage to small craft. The entrance is reported to be difficult to identify. A prominent radar scanner is reported (1999) to stand close NE of the cove.

Worbarrow Bay (50°37'N., 2°12'W.), an open bight, lies 1.5 miles E of Lulworth Cove. It is entered between a group of rocks on the W side and Worbarrow Tout, a point surmounted by a conical hill, on the E side. The bay has high cliffy shores divided in the center by Arish Mell Gap. This gap is fronted by a conspicuous white sandy beach.

The bay affords anchorage in its E part during all but S winds. The anchorage has a depth of 11m, fine sand.

A conspicuous tower stands near the shore, 2.2 miles ESE of the E entrance point of the bay.

Caution.—An outfall pipeline, marked at its seaward end by a lighted buoy, extends about 2 miles SSE from Arish Mell Gap.

2.16 Saint Albans Head (St. Aldhelms Head) (50°35'N., 2°03'W.) is a bold headland, 107m high, bordered by cliffs on all sides. It is radar conspicuous. A chapel and a coast guard station stand on this headland.

Saint Albans Ledge, with depths of 8.5 to 16m, extends up to 2.5 miles SSW of the headland.

Because of the uneven bottom, strong eddies form off this ledge and the overfalls within may be dangerous to small craft. The current runs continuously SE along the W side of the headland and, during the flood tide, a race forms to the SW.

Anvil Point (50°36'N., 1°57'W.), 3.5 miles ENE of Saint Albans Head, is low and cliffy with higher land close within. A main light is shown from a conspicuous tower with a dwelling, 12m high, standing on the point.



Anvil Point Light

A conspicuous castellated building is situated on Durlston Head, 0.3 mile NE of the light. Anvil Point is reported to be radar prominent.

Swange Bay, lying 1.5 miles N of Anvil Point, is entered between Peveril Point and Ballard Point, 1.5 miles NNE. Peveril Ledge, with depths of less than 5m, extends up to about 0.5 mile E of Peveril Point and is marked by a buoy. Swanage, a resort, occupies the S part of the bay. Handfast Point, conspicuous, is located 0.8 mile NNE of Ballard Point. The shore between is fronted by steep chalk cliffs. Old Harry, a prominent

column of chalk 18m high with a flat grassy top, stands close off this point.

Anchorage, with good shelter from W winds, may be taken about 0.7 mile N of Peveril Point. There are depths of about 8m over good holding ground of mostly sand and clay.

Caution.—A firing range area extends up to 12 miles seaward between Saint Albans Head and Lulworth Cove. Lighted buoys associated with this range are moored in the vicinity of Saint Albans Ledge. When the range is in use, red flags and red lights are displayed from a hill close NNE of the cove and from above the coast guard station on the headland.

During summer, crab pots may be moored within 0.5 mile of the shore in the vicinity of Saint Albans Head.

A measured mile (1,849m), marked by two sets of range beacons, is situated close W of Anvil Point and may best be seen on the chart.

A spoil ground area lies centered 4 miles NE of Anvil Point and may best be seen on the chart.

2.17 Poole Harbour (50°41'N., 1°57'W.) (World Port Index No. 35480), one of the most extensive natural harbors in England, lies in the W part of Poole Bay. Entry is limited by a bar.

Tides—Currents.—The tide rises about 2.2m at springs and 1.7m at neaps.

Within the harbor the tidal cycle is abnormal and results in the phenomenon of a double HW with the tide standing at or near HW for 6 or 7 hours. The neap tides are very irregular and may produce a second HW, which is higher than the first. Barometric pressure and strong winds can change the tidal cycles significantly.

At the entrance the flood current attains a maximum rate of 3 knots at springs. The ebb current, which is weak for the first 3 hours, attains a maximum rate of 4.7 knots at springs. At neaps both tidal currents are weak and uncertain.

Depths—Limitations.—The harbor, which resembles a lake at HW, has a ro-ro ferry terminal and provides extensive facilities for yachts, small craft, and offshore exploration support vessels. Large areas of mudflats uncover at LW.

Swash Channel leads NW through the bay to the harbor entrance. A training bank, which covers at half tide, lies along its W side. The fairway is about 130m wide and has a controlling depth of 6m. Strong S winds raise a heavy sea on the bar and strong E winds may alter the depths. The seaward entrance of this approach channel is marked by Bar Lighted Buoy No. 1.

The harbor entrance lies between South Haven Point, on the S side, and Sandbanks, a low peninsula, on the N side. The peninsula extends 1 mile SW from Poole Head and has numerous buildings along its length. A chain ferry crosses the channel between Sandbanks and South Haven Point.

Middle Ship Channel, 80m wide, is the main fairway leading from the entrance to the commercial facilities. It has a controlling depth of 6m and is marked by stakes and lighted buoys. North Channel and Little Channel, two other fairways, have controlling depths of 4m and 3.8m, respectively.

There is a boat channel for small craft on the W side of Swash Channel, between it and the training bank. A historic wreck, marked by a buoy, lies 0.6 mile ESE of the light at the SE end of the training bank.

Poole Bridge, a bascule bridge, has an opening 18.3m wide and is situated near the SW part of the town.

The ro-ro terminal has three berths. The largest is 130m long and has a depth of 6m alongside. The other main commercial facilities include an oil berth, 82m long, with a depth of 4.9m alongside; Poole Town Quay, 400m long, which has depths of 3.6 to 4.5m alongside and is used for general cargo; New Quay, 158m long, which has a depth of 4.9m alongside and is used for bulk and container cargo; and CEGB Quay, 300m long, with depths of 4.5 to 5m alongside.

Vessels up to 20,500 grt, 158m in length, and 5.4m draft can be accommodated within the harbor.

Aspect.—A castle, with a tower and flagstaff, stands on the SE side of Brownsea Island, close inside the harbor entrance, and is prominent from the approaches. A number of tall buildings are located in the vicinity of a marina on the NE side of the harbor, about 1.5 miles N of the entrance.

Pilotage.—Pilotage is compulsory for all vessels over 50m in length and vessels of 30m or more in length or 10m or more in beam capable of carrying more than 12 passengers, except those exempted by law.

Vessels should send an ETA 24 hours in advance to the agent and to the VTS Harbor Control Center. Pilots can be contacted by VHF and generally board in the vicinity of Bar Lighted Buoy No. 1. Vessels requiring pilotage should then contact the VTS Harbor Control Center on VHF channel 14 giving at least 1 hour 30 minutes notice of arrival at the boarding position.

Regulations.—A Vessel Traffic Service (VTS) system operates in the vicinity of the harbor. Vessels of 25m or more in length should report to the VTS Harbor Control Center on VHF channel 14 when passing Bar Lighted Buoy No. 1 (50° 39'N.,1° 55'W), North Haven Lighted Beacon (50° 41'N., 1° 57'W), Aunt Betty Lighted Buoy No. 50 (50° 42'N.,1° 57'W), and when arriving at the berth. Incident, Damage, or Oil Pollution Reports should be sent as necessitated.

Signals.—Bridge traffic lights are visible by day and night and are exhibited from towers on the bridges. A fixed red light indicates vessels are not to proceed, a flashing green light indicates vessels may proceed with caution, and a fixed green light indicates vessels are to proceed, bridge is almost fully open. The bridge will be opened at any time for commercial vessels.

Anchorage.—The best anchorage while awaiting the pilot is about 0.8 mile NE of Handfast Point, in a depth of 12m, sand and gravel. Anchorage should not be attempted in strong E winds and caution is necessary not to overrun the area in thick weather and proceed toward the dangers in the NW part of Poole Bay.

Caution.—Numerous pleasure craft may be encountered in the approaches to the harbor.

2.18 The coast between the entrance to Poole Harbour and Hurst Point, 15 miles E is indented by Poole Bay and Christchurch Bay. The shores of the bays consist of a succession of earthy cliffs intersected by deep ravines. These ravines, known as chines, are worn by the action of small streams. Frequent landslides occur along this stretch of shore.

The shore of Poole Bay is almost entirely occupied by the resort of Bournemouth with its many buildings. A prominent coast guard station is situated on a hill near the shore, about 0.5

mile W of Hengistbury Head, the E extremity of Poole Bay. A conspicuous water tower stands at an elevation of 52m 1.7 miles WNW of the coast guard station.

Christchurch Priory, with a conspicuous tower, stands 1.3 miles NW of Hengistbury Head.

Anchorage can also be obtained in Poole Bay as convenient. However, the roadstead is exposed and can become very uncomfortable in prolonged S or SE gales.

Hurst Point (50°42'N., 1°33'W.) is the E entrance point of Christchurch Bay. It is located at the SE end of a low-lying, narrow neck of land on the N side of Needles Channel.



Hurst Point Light

A main directional sector light is shown from a prominent round tower, 26m high, standing on the point. A conspicuous castle is situated in the vicinity of the point.

Shingles (50°41'N., 1°35'W.) is a bank of sand, gravel, and shingles which extends about 4 miles SW of Hurst Point. This shallow bank is marked by lighted buoys; its steep-to SE side forms the NW side of Needles Channel. Due to the wash of the sea and the scour of the currents, this bank is subject to constant changes. With the least swell the sea breaks violently on the shallower parts.

North Channel leads between Hurst Point and the NE end of Shingles. This narrow fairway has a least depth of 4.8m.

Isle of Wight

2.19 The Isle of Wight (50°40'N., 1°18'W.) is situated off the Port of Southampton and Portsmouth, on the S coast of England. It is separated from the mainland by a stretch of water known as The Solent. The Solent can be entered from W via Needles Channel and from E via several channels lying in the vicinity of the Nab Tower.

Needles Point (50°40'N., 1°35'W.) is the W extremity of the isle. Precipitous white chalk cliffs extend up to 4 miles E of this point. The cliffs, which rise up to 125m high, are very conspicuous from seaward and contrast sharply with the dark ground behind them. A distinctive break in the cliffs occurs at Freshwater Bay, about 3 miles E of the point. A prominent hotel stands in the vicinity of this bay. Steep clay cliffs extend between the E end of the chalk cliffs and the S extremity of the isle.

Needles Rocks (50°40'N., 1°35'W.), three in number, extend up to 0.2 mile W of Needles Point. A main light is shown from



Needles Rock Light



Needles Rocks

a conspicuous round granite tower, 31m high, standing at the seaward side of the outermost rock.

The Bridge (50°38'N., 1°39'W.), a dangerous reef, extends up to about 1.2 miles W of Needles Point. A lighted buoy, equipped with a racon, is moored in the vicinity of the seaward extremity of this reef.

The Bridge is marked by ripples in calm weather and by distinctive overfalls in rough weather. During S gales it is marked by a well-defined line of broken water.

Alum Bay lies between Needles Point and Hatherwood Point, 0.9 mile NE. This bay has high white cliffs on its S side and cliffs of varying colors on its E side. The junction of these two different types of cliffs forms a conspicuous feature.

Fort Albert is also conspicuous. It is built into the side of the isle about 2.1 miles NE of Hatherwood Point.

2.20 Saint Catherines Point (50°35'N., 1°18'W.), low and rounded, is the S extremity of the Isle of Wight. A main light is shown from a prominent castellated tower and dwelling, 26m high, standing on the point. This light structure is very distinctive when viewed from E or W.

The land within the point rises gradually for 1 mile toward Saint Catherines Hill, which is the highest on the isle. A former light tower stands on the hill and is prominent. Hoy's Monument, situated about 1 mile N of the hill, is also prominent from seaward.

Conspicuous television towers stand on the heights at Chillerton Downs, about 4.8 miles NNW of the point, and at Rowridge, about 6.8 miles NNW of the point.



Saint Catherines Light

Between Saint Catherines Point and Dunnose, about 5 miles ENE, the coast consists of a low cliff with large masses of rock, known as The Undercliff, rising behind it. This formation is backed by a precipitous rocky wall which rises to a height of almost 150m.

The town of Ventnor, a resort, stands close W of Dunnose. Its lights are conspicuous at night. Several conspicuous radio masts and radar scanners are situated on the downs in the vicinity of the town and may best be seen on the chart.

Culver Cliff, located about 10 miles NE of Saint Catherines Point, is very conspicuous. It can be easily identified by the marked contrast between the white chalk bluff and the land in the vicinity.

Yarborough Monument stands close W of the cliff, at an elevation of about 100m, and is conspicuous from seaward.

Foreland, the E extremity of the isle, is low and fronted by dangerous reefs and shoals. Numerous prominent buildings stand in the vicinity of this point.

Caution.—Dangerous reefs extend up to 1.5 miles offshore in the vicinity of Saint Catherines Point.

A tidal race occurs off Saint Catherines Point and may be violent when the wind opposes the current. The race may be especially violent in an area lying SE of the point when a W spring current is accompanied by a W gale.

A disused explosives dumping ground area, the limits of which may best be seen on the chart, lies about 3.5 miles E of Saint Catherines Point.

The Solent

2.21 The Solent separates the Isle of Wight from the mainland, and provides access to Portsmouth and the Port of Southampton. Several small harbors lie along the shores of this stretch of water and are used by pleasure craft, local ferries, and yachts. Entry into The Solent may be made from the W, through Needles Channel, or from the E, through the channels lying in the vicinity of Nab Tower.

Pilotage

Southampton.—The Port of Southampton Compulsory Pilotage Area covers the Port of Southampton, Southampton Water, and The Solent. Its boundary is formed by a line joining the following points:

- 1. Western Limit:
 - a. Stansore Point (50°47.2'N., 1°20.4'W.).
 - b. Egypt Point, Isle of Wight (50°46.0'N., 1°18.7'W.).
- 2. Southern Limit:
 - a. Egypt Point, Isle of Wight (50°46.0'N., 1°18.7'W.).
 - b. Old Castle Point (50°45.9'N., 1°16.5'W.).
- 3. Eastern Outer Limit:
 - a. Culver Cliff, Isle of Wight (50°40.0'N., 1°05.6'W.).
 - b. Nab Tower Light (50°40.0'N., 0°57.1'W.).
 - c. 1.1 miles S of Selsey Bill (50°43.3'N., 0°47.2'W.).
 - d. 0.1 mile S of Selsey Bill.
 - e. Chichester Bar Light (50°45.9'N., 0°56.4'W.).
 - f. Horse Sand Fort Light (50°45.0'N., 1°04.2'W.).
 - g. Outer Spit Lighted Buoy (50°45.5'N., 1°05.4'W.).
 - h. Gilkicker Point Light (50°46.4'N., 1°08.4'W.).
- 4. Eastern Inner Limit:
 - a. Gilkicker Point Light (50°46.4'N., 1°08.4'W.).
 - b. West end of Ryde Pier, Isle of Wight.

Pilotage is compulsory within the above area for all vessels over 61m in length, including fishing vessels, and all vessels of 20m or more in length carrying more than 12 passengers.

Ministry Of Defense (MOD) owned or operated vessels, HM vessels, and naval vessels of foreign and Commonwealth countries are exempted.

Inbound vessels requiring pilotage within the area should send an ETA at least 12 hours in advance to Southampton Vessel Traffic Services (VTS) through a coast radio station or by telex (direct to the VTS center). The message must state the maximum draft, the point of destination within the area, and the required pilot boarding position.

Vessels should also contact Southampton VTS directly on VHF channel 9 and report their ETA not later than 2 hours prior to arrival. Vessels should maintain VHF contact if it is necessary to change the ETA.

Vessels requiring pilots for only Portsmouth, Cowes, or the River Medina should contact the appropriate competent harbor authority.

Pilots for the Port of Southampton board vessels in the E approach, as follows:

- 1. Deep-draft oil tankers—in position 50°36.04'N, 0°57.05'W. (4 miles S of Nab Tower Light.)
- 2. Large container vessels—in position 50°39.33'N, 0°55.95'W. (1 mile SE of Nab Tower Light.)
- 3. Vessels over 150m in length and LPG vessels—in position 50°40.04'N, 0°58.64'W. (1 mile W of Nab Tower Light.)
- 4. Vessels between 61m and 150m in length carrying dangerous or polluting cargo in bulk—within a boarding area bound by the following positions:
 - a. 50°43.77'N, 1°02.24'W.
 - b. 50°43.36′N, 1°03.10′W.
 - c. 50°42.82'N, 1°01.22'W.
 - d. 50°43.23'N, 1°00.37'W.

5. Vessels between 61m (20m if carrying more than 12 passengers) and 150m in length, other than those described in section 4 above—in position 50°45.8'N, 1°09.1'W (about 0.75 mile NW of North Sturbridge Lighted Buoy).

In the event of the visibility being reduced to less than 0.5 mile or traffic congestion occurring in the vicinity of North Sturbridge Lighted Buoy, the pilot boarding position for vessels described in section 5 above will be temporarily relocated to the area stated in section 4 above.

It is recommended that if voluntary pilotage is required by vessels in a non-compulsory area, advance notification of 24 hours is desirable to ensure that a pilot will be available on arrival at the appropriate boarding position.

Pilots for the Port of Southampton board vessels of 61m or more in length in the W approach in position 50°45.40'N, 1°21.57'W.

Pilotage on a voluntary/optional basis is available, by prior arrangement, from Fairway Lighted Buoy (50°38'N., 1°39'W.) to the W limit of the Port of Southampton Compulsory Pilotage Area.

Outbound vessels or vessels moving within the Southampton Pilotage Area, which require the services of a pilot, should give Southampton VTS at least 1 hour 30 minutes notice of their ETD.

If pilotage is required to extend beyond the compulsory pilotage limits of the East and West Solent, 12 hours notice is desirable to ensure that suitable facilities can be provided for voluntary or optional pilotage in the West and East Solent.

Portsmouth.—The Portsmouth Compulsory Pilotage Area covers the harbor and approaches. Its boundary is formed by a line joining the following points:

- 1. Gilkicker Point Light (50°46.4'N., 1°08.4'W.).
- 2. W end of Ryde Pier, Isle of Wight, then along coast to:
- 3. Culver Cliff, Isle of Wight (50°40.0'N., 1°05.6'W.).
- 4. Nab Tower Light (50°40.0'N., 0°57.1'W.).
- 5. 1.1 miles S of Selsey Bill (50°43.3'N., 0°47.2'W.).
- 6. 0.1 mile S of Selsey Bill.
- 7. Chichester Bar Light (50°45.9'N., 0°56.4'W.).
- 8. Horse Elbow Foul Buoy (50°44.4'N., 1°03.4'W.), then due N to the shore (50°46.9'N., 1°03.4'W.).

Pilotage is compulsory within the above area for all vessels 48m or more in length and all vessels of 20m or more in length carrying more than 12 passengers.

The categories of vessels that are exempted from compulsory pilotage by the Portsmouth Competent Harbor Authority include the following:

- 1. Vessels in government service except when berthing or unberthing at any non-MOD facility.
- 2. Vessels with an Admiralty Pilot (Federal Pilot) embarked while proceeding to or from any MOD facility. Such vessels proceeding between a MOD facility and a commercial facility are not exempt for berthing and unberthing at the latter facility.
- 3. Vessels in transit through The Solent on passage to or from any position W of a line joining Gilkicker Point Light and the W end of Ryde Pier. Such vessels should not cross N of a line joining Gilkicker Point Light, Horse Sand Fort Light (50°45'N., 1°04'W.), and Horse Elbow Foul Buoy.

- 4. Vessels inbound to any position W of a line between Gilkicker Point Light and Ryde Pier going to an anchorage in South Helen Roads.
- 5. Vessels not more than 150m in length while to the SE of a line joining Nenlestone Point (50°43'N., 1°06'W.), Warner Lighted Buoy (50°44'N., 1°04'W.), Horse Elbow Foul Buoy, and the shore due N.

Inbound vessels requiring pilotage within the area should send an ETA at least 24 hours in advance to Portsmouth Pilots, stating vessel's length, beam, draft, last port of call, and intended berth in Portsmouth.

Confirm ETA at pilot boarding points 8 hours and 1 hour 30 minutes in advance on VHF channel 11. Vessels at anchor requiring a pilot should also follow the inbound procedure.

Outbound vessels or vessels moving within the area should send ETD 8 hours and 1 hour 30 minutes in advance, stating draft destination and whether proceeding through East Solent or West Solent.

Pilots for Portsmouth board, as follows:

- 1. Vessels over 150m in length and LPG vessels—in position 50°40.04'N, 0°58.64'W (4 miles S of Nab Tower Light).
- 2. Vessels between 61m and 150m in length—within a boarding area bound by the following positions:
 - a. 50°43.77'N, 1°02.24'W.
 - b. 50°43.36'N, 1°03.10'W.
 - c. 50°42.82'N, 1°01.22'W.
 - d. 50°43.23'N, 1°00.37'W.
- 3. Vessels 48m or more in length using the W approach—in position 50°45.80'N, 1°09.00'W.

Regulations

Port Operations and Information Service.—A Port Operations and Information Service covers Southampton Water, The Solent, the Port of Southampton, and Portsmouth. The monitoring and coordination of shipping movements is carried out by the following two stations:

- 1. Vessel Traffic Services (VTS) Southampton, which coordinates the movements of all vessels 20m or more in length in The Solent and Southampton Water, excluding the Port of Portsmouth N of a line between Gilkicker Point and Horse Sand Fort Light.
- 2. Queen's Harbour Master (QHM), Portsmouth, which coordinates the movements of all vessels N of a line between Gilkicker Point and Horse Sand Fort Light.

All vessels carrying dangerous or polluting goods entering the area should comply with the Merchant Shipping Regulations. Such vessels are required to complete a Check List, a copy of which must be sent to the Harbor Master by fax or telex and another copy handed to the pilot upon boarding.

The following procedures are mandatory for all vessels over 20m in length:

- 1. Inbound vessels should establish contact with Southampton VTS on VHF channel 12 when approaching the Nab Tower or the Needles. Their report should include the following:
 - a. Vessel's name, call sign, and nationality.
 - b. Maximum draft, loa, and beam.
 - c. Destination and last port of call.

- d. ETA at various locations as requested.
- e. Deficiencies of vessel, navigation equipment, machinery, and cargo.
- f. Tankers only are to notify of any changes to information previously given (see Tanker Regulations above) and confirmation that the Tanker Check List has been completed.
- 2. Unseaworthy, damaged vessels, or vessels from which oil or dangerous substances are escaping or liable to escape must obtain permission before entering the ports of Southampton or Portsmouth.
- 3. Vessels requiring to anchor in the small ship anchorage or controlled anchorages 1, 2, or 3 are requested to seek permission from Southampton VTS (VHF channel 12) before entering the W approach channel (Thorn Channel) or North Channel (this also applies to outbound vessels).
- 4. All vessels proceeding to and from the Town Quay Marina should contact Southampton VTS and obtain permission before entering or leaving.
- 5. Within the area, vessels should maintain a continuous listening watch on VHF channel 12 (vessels in Portsmouth Harbour, N of the line from Gilkicker Point to Horse Sand Fort Light, should monitor VHF channel 11 or 13 as appropriate). In addition, vessels should report, as follows:
 - a. When passing the designated reporting points. (See Signals for list.)
 - b. Fifteen minutes before getting underway from an an-chorage in The Solent to Southampton VTS (making an inbound or outbound report, as appropriate); vessels bound for Portsmouth should also report to QHM Portsmouth stating ETA at Outer Spit Buoy.
 - c. On berthing.
 - d. When anchored prior to berthing or seeking shelter.
 - e. When a pilot has boarded.
- 6. All gas tankers, loaded, partly loaded, or not gas free, navigating between North Sturbridge Lighted Buoy and Warner Lighted Buoy should contact QHM Portsmouth on VHF channel 11 for movement information.
- 7. Outbound vessels and vessels shifting berth should report to Southampton VTS on VHF channel 12, as follows:
 - a. From the Port of Southampton, at least 15 minutes before leaving the berth.
 - b. From the port of Portsmouth on passing Southsea War Memorial. In addition, vessels in Portsmouth Harbour should request permission from QHM Portsmouth before leaving the berth.

The VTS Center at Southampton offers radar coverage assistance to vessels upon request.

Vessels involved in an incident or accident should report immediately to Southampton VTS stating whether assistance is required.

All sightings of significant patches of oil pollution should be reported to Southampton VTS or QHM Portsmouth as appropriate.

Portsmouth Harbour Fog Routine will be announced on VHF channels 11, 13, and 73 when visibility is reduced so low that normal shipping movements are considered dangerous. Vessels of over 20m in length must obtain permission from QHM

Portsmouth on VHF channel 11 before moving in the harbor or its approach channels.

Southampton VTS may be contacted by e-mail at the following web address:

vtssouthampton@abports.co.uk

The Solent and Southampton Water Marine Emergency Plan (Solfire), incorporating the Oil Spill Contingency Plan (Solspill), has been developed to deal with any marine accidents, including pollution, within The Solent, Portsmouth, the Port of Southampton, and Southampton Water. Details of Emergency Solfire will be broadcast by Southampton VTS or QHM Portsmouth on VHF as deemed appropriate.

General—Special regulations are in effect for vessels constrained by draft and vessels restricted in their ability to maneuver. These regulations are in force within the Port of Southampton and Portsmouth.

Vessels "constrained by draft" are defined, as follows:

- 1. Vessels having a draft of 10.5m or over.
- 2. Vessels having a length of 288m or over.
- 3. Vessels having a tonnage of 100,000 dwt or over.

Extracts from the local regulations are stated below.

Any vessel other than a "vessel not under command" or a vessel "restricted in ability to maneuver" should, if the circumstances permit, avoid impeding the safe passage of a vessel which is displaying the shape or lights for a vessel "constrained by draft."

A vessel "constrained by draft" and inbound from Nab Tower to Southampton is at particular risk from outbound vessels when off the entrance to Portsmouth and when off North Sturbridge Buoy and shaping a course to pass S of Ryde Middle Shoal.

Therefore, vessels proceeding seaward from Portsmouth, or from Southampton N of Ryde Middle Shoal, should take every precaution to avoid impeding a vessel "constrained by draft" and avoid presenting such vessels with a crossing situation.

All vessels "constrained by draft" or "restricted in ability to maneuver" must have permission from QHM Portsmouth or Southampton VTS before navigating in Portsmouth Harbour or the Port of Southampton.

All vessels "constrained by draft" navigating in the Port of Southampton must be given the sole occupancy of the channel between Hook Lighted Buoy and the seaward dredged limit of Thorn Channel.

Special regulations are also in force to ensure the safe navigation of gas tankers. Such vessels may not enter areas within The Solent where the visibility is less than 0.5 mile.

Gas tankers navigating between Hook Lighted Buoy and West Bramble Lighted Buoy or between East Bramble Buoy and Calshot Lighted Buoy, in North Channel, shall be given sole occupancy of these channels.

No gas tanker exceeding 8,000 cubic meters total capacity or 6,000 grt is permitted to enter or leave via the West Solent and Needles Channel.

Vessels are advised to consult the local authorities and the pilot for the latest information concerning the regulations.

Signals

Vessels should report to Southampton VTS on VHF channel 12 at the designated Reporting Points, with the following exceptions:

- 1. Points marked * or ** are additional ones for vessels entering Portsmouth; vessels passing these should report to the QHM Portsmouth on VHF channel 11 or 13 as appropriate.
- 2. At points marked **, the report should include the ETA at Outer Spit Lighted Buoy. After reporting, such vessels should resume a listening watch on VHF channel 12. The designated Reporting Points are listed below.
 - 1. Inbound—Solent—East approach:
 - a. On an arc, with a radius of 10 miles, from Nab Tower Light (50°40'N., 0°57'W.).
 - b. * VLCC (Deep-Draft) anchorage.
 - c. Nab Tower (or when pilot boarded), specify distance W or E of tower.
 - d. **Nab Tower (or when pilot boarded).
 - e. * Warner Lighted Buoy.
 - f. Approaching No Man's Land Fort.
 - g. * Saddle Lighted Buoy.
 - h. * Before entering Swashway Channels.
 - i. South Ryde Middle Lighted Buoy.
 - 2. Inbound—Solent—West approach:
 - a. Needles Channel Fairway Lighted Buoy (or when pilot boarded).
 - b. Yarmouth, Isle of White.
 - c. Between West Lighted Buoy and East Lepe Lighted Buoy.
 - d. ** Prince Consort Lighted Buoy, Cowes Roads.
 - e. * North Sturbridge Lighted Buoy.
 - f. * Before entering Swashway Channels.
 - g. * Saddle Lighted Buoy.
- 3. Inbound—Southampton Water—Calshot Castle: Hook Lighted Buoy.
 - 4. Outbound—Southampton Water:
 - a. Eling Lighted Buoy.
 - b. Royal Pier, Southampton.
 - c. Crosshouse Beacon, River Itchen.
 - d. Hythe Pier.
 - e. Calshot Castle/Hook Lighted Buoy.
 - 5. Outbound—From Portsmouth only:
 - a. Naval War Memorial (Southsea).
 - b. Saddle Lighted Buoy.
 - 6. Outbound—Solent—Eastward:
 - a. No Man's Land Fort.
 - b. Nab Tower (specify distance E or W of tower).
- 7. Outbound—Solent—Westbound: Yarmouth, Isle of White.

Outbound vessels are requested to display an "E" flag over the Answering Pendant when proceeding E towards the Nab Tower and the Answering Pendant over a "W" flag when proceeding W towards The Needles.

Caution

Dredges may frequently be encountered within the approach channels leading to The Solent.

High speed craft and large ro-ro ferries may be encountered within the The Solent and its approaches.

During the summer, numerous pleasure craft and yachts may be encountered within The Solent and its approaches. Buoys of various shapes and colors, mostly yellow, are used for racing marks on a seasonal basis.

Large and deeply laden tankers may be encountered turning into Thorn Channel from the E. (See Southampton—Regulations.)

Numerous oyster dredgers may be encountered at certain times of the year working in the vicinity of Stanswood Bay, W of the Western Approach Channel and the S part of Thorn Channel

Several submarine pipeline and cable areas are situated within The Solent and may best be seen on the chart.

The direction of buoyage changes in The Solent in the vicinity of Western Approach Channel and is indicated on the chart.

Western Approach to The Solent

2.22 Needles Channel (50°38'N., 1°39'W.), lying between the W extremity of the Isle of Wight and the mainland to the N, forms the W approach to The Solent. It has a least depth of 10.5m and may be used at any time. Vessels with drafts over 9.5m should not attempt to use this channel, especially at LW with any scend.

Solent Bank (50°44'N., 1°26'W.), with a least depth of 11.2m, divides the W part of The Solent into two channels, The S channel is usually favored because of its width and overall deeper depths.

Tides—Currents.—At Hurst Point (50°42'N., 1°33'W.), tides rise about 2.7m at MHWS and about 2.3m at MHWN.

The tidal currents run mainly in the direction of the channel and attain their greatest rates between Hurst Point and Fort Albert, where in mid-channel they flow at up to 4.5 knots. On the ebb, the current sets down on Shingles Bank. On the flood, the current comes off the bank with numerous overfalls.

Needles Channel is subject to strong tidal currents and its width is liable to change. The section in the vicinity of The Bridge is subject to dangerous overfalls during heavy weather at all stages of the tide.

The tidal currents in the vicinity of Solent Bank set generally E and W across the shoals and reach a maximum rate of 2.8 knots at springs.

Aspect.—In addition to the landmarks listed in paragraph 2.18, paragraph 2.19, and paragraph 2.20, Outer Fairway Lighted Buoy is moored in the approach about 3 miles SW of Needles Point. The fairway is marked by lighted buoys and indicated by directional light sectors which may best be seen on the chart.

A conspicuous chimney, 60m high, stands near a power station at the NE end of the channel. It is situated close to the W entrance point of Southampton Water.

Regulations.—The IMO has adopted a recommendation that laden tankers over 10,000 grt should avoid this channel.

Caution.—The W approach to The Solent, via Needles Channel, offers a savings of about 25 miles over the E approach. However, in poor weather, or with an unfavorable tidal current, the savings in distance will be more than offset by the loss in

speed and the extra care required to navigate this channel. Local knowledge is advised when transiting this channel.

Eastern Approach to The Solent

2.23 Nab Tower (50°40'N., 0°57'W.) is situated 4.6 miles ESE of Foreland, the E extremity of the Isle of Wight, and marks the E approach to The Solent. It is constructed of steel and concrete, 28m high, and equipped with a racon. A main light is shown from the tower.



Nab Tower

The E approach lies between Foreland and Selsey Bill, 11 miles ENE. The shore extending NW of Selsey Bill is mostly low-lying.

The main dangers on the SW side of the outer part of the approach are Princessa Shoal and New Grounds which extend up to about 2 miles SE and 3 miles E, respectively of Foreland. The main dangers on the E side of the outer approach are Bullock Patch and Pullar Bank, which lie about 5 miles WSW and 3 miles SSW, respectively, of Selsey BIII.

Nab Channel (50°42'N., 0°57'W.), 396m wide, is entered about 1 mile NNE of Nab Tower. It leads 2 miles NNW and NW into The Solent. This channel is intended for use by inbound, deeply-laden tankers. It is dredged to a depth of 13.3m and can be used by tankers with drafts up to 14.9m at HW.

Lighter draft vessels should keep clear of Nab Channel.

A Deep-Draft Vessel Approach Area, the limits of which may best be seen on the chart, extends up to 3.2 miles SSE and up to 1.2 miles N of Nab Tower.

A ridge, with depths of less than 15m, extends across the Deep-Draft Vessel Approach Area to the S of Nab Tower. Vessels with drafts of 13m or more should exercise extreme caution when approaching the pilot boarding positions. Depths of less than 13m exist in areas to the SE and S of Nab Tower, and may best be seen on the chart.

Deep-draft vessels, with drafts of 13m or more, should exercise extreme care when approaching the pilot boarding positions, and should not proceed N of 50°37.3'N at LWS.

Deep-draft vessels, other than tankers, should approach from the S and pass about 0.4 mile E of Nab Tower. They should then proceed in a NNW direction passing between New Grounds and the W side of Nab Channel. Vessels of suitable draft may pass either side of Nab Tower. Vessels should then enter the buoyed fairway leading WNW through The Solent to the E of the first pair of lighted buoys and W of the inner entrance of Nab Channel.

Light-draft vessels may pass over the NE end of New Grounds, in a least depth of 8.8m.

The buoyed fairway leads WNW through the E part of The Solent to Spithead, an area lying S of Portsmouth, and Western Approach Channel, at the entrance to Southampton Water.

Thorn Channel (50°48'N., 1°18'W.) and Calshot Reach form the main fairway leading into Southampton Water, which extends about 5 miles NW to the port facilities. The fairway is dredged to a depth of 12.6m and vessels with drafts up to 14.9m can transit at HW.

Tides—Currents.—At Nab Tower, tides rise about 4.5m at MHWS and 3.7m at MHWN.

There is a stand at HW which lasts for 2 or 3 hours twice during every 24-hour period. This allows large vessels to proceed directly from the sea to the area of Southampton.

In the vicinity of Nab Tower, the currents rotate counter-clockwise from the E on the flood, through N to W on the ebb, and then through S to the flood again. The maximum rate of the current to be expected is about 2 to 3 knots at springs and 1 knot at neaps.

Aspect.—In addition to Nab Tower, the landmarks described below are prominent from seaward. Saint Helen's Fort, a round stone structure marked by a light, stands 0.6 mile offshore, 1.2 miles NW of Foreland.

No Man's Land Fort, a round stone structure marked by a light, stands 1.3 miles offshore, 2.1 miles NNW of Saint Helen's Fort. A submerged barrier extends about 0.4 mile SW from this fort.

Horse Sand Fort (50°45.0'N., 1°04.3'W.), a round stone structure marked by a light, stands on the N side of The Solent, about 1 mile NE of No Man's Land Fort. A submerged barrier extends 1.7 miles N from this fort to the mainland shore.

Additional landmarks are described in paragraph 2.22.

Pilotage.—See paragraph 2.21 for pilotage information and details of pilot boarding positions for Southampton and Portsmouth.

Anchorage.—A Deep-Draft Vessel Anchorage Area, used by VLCCs, lies centered about 5.5 miles SSW of the Nab Tower and may best be seen on the chart. Vessels using this anchorage area are required to report by VHF to Southampton VTS Center and the QHM Portsmouth.

Anchorage may be obtained, clear of a foul area, within Saint Helen's Road. The recommended berth lies in depths of 10 to 12m, about 1.6 miles NNE of Foreland. This anchorage is sheltered from all but SE winds and has good holding ground of mud and stiff blue clay.

Vessels should not anchor in the Deep-Draft Vessel Approach Area extending SSE of Nab Tower.

Caution.—In the S approaches, about 7 miles SSE of Nab Tower, there are depths of less than 20m. Heavy overfalls have been observed in this area. Numerous wrecks lie in this vicinity and may best be seen on the chart.

A spoil ground area lies about 4 miles S of Nab Tower and may best be seen on the chart.

Dredges may be frequently encountered within an area, the limits of which are shown on the chart, lying centered about 2.5 miles SSE of Nab Tower.

Several wrecks, with depths less than 10m, lie close adjacent to the fairway channel leading through the E part of The Solent and may best be seen on the chart.

Portsmouth (50°48'N., 1°06'W.)

World Port Index No. 35600

2.24 Portsmouth, situated on the N side of the E part of The Solent, is a major naval base, the dockyard of which fronts a large area at the E side of the harbor. There are also facilities for commercial ro-ro ferries and pleasure craft.

Winds—Weather.—Winds often blow along The Solent and Spithead, with the main breeze blowing in either from the SW or SE.

The sea breeze, which reaches force 3 or 4 on the coast and more over the water, increases with the day. The land breeze, more prevalent on clear winter nights, is usually from the NW but is light. Fog occurs from 3 to 4 days a month in winter but is rare in summer. Most heavy fogs are radiation in nature and generally lift by mid-morning.

Tides—Currents.—The tides rise about 4.6m at MHWS and 3.8m at MHWN.

Vessels usually enter or leave the harbor during the first 3 or 4 hours of the flood current, during the first, second, and fifth hours of the ebb current, and at slack low water.

The best time for large vessels to enter the harbor is as soon after LW as there is sufficient depth in the channel. They may also enter after HW, arranging to pass Outer Spit Lighted Buoy between 30 minutes and 1 hour after HW, depending upon the distance to the berth which is to be occupied. The maximum currents are usually experienced on the ebb when spring rates may reach 5.5 knots in the entrance, about 3 hours and 30 minutes after HW.

During maximum tidal flow, countercurrents in the harbor are common.



Portsmouth Naval Base—N part

Depths—Limitations.—Spithead, an area within the E part of The Solent, is bound by Spit Sand, on the N side, Horse and Dean Sand, on the NE side, and Ryde Sand and No Man's Land, on the S side.

The main entrance channel leads N and NW between the dangers from the N side of this area to the harbor. The entrance fairway is maintained at a dredged depth of 9.5m as far as the N end of the main naval base. Vessels up to 9.5m draft can enter the harbor.

A small craft channel, for vessels under 20m in length, lies to the W of the main entrance fairway. It is 50m wide and may best be seen on the chart.

The Cambers, a tidal basin, is entered close N of Round Tower, at the E side of the a harbor. It has an entrance, 45m wide, and provides berths for small ferries and fishing vessels.

The naval base occupies a large portion of the harbor frontage on the E side of the harbour. In addition, several mooring buoys, for use by naval vessels, are situated within the harbor and may best be seen on the chart.

The naval installations, which may best be seen on the chart, include three basins. The largest basin, No. 3, is maintained at a depth of 5.7m. It may be entered through a series of locks situated between South Wall and North West Wall. The two largest locks, which are used as drydocks, are 259m long and 33.5m wide.

HMS Victory, the former flagship of Vice Admiral Lord Nelson, is berthed at the naval base in the SE corner of No.2 Basin, in the vicinity of the naval museum. This 18th Century warship is the oldest serving Royal Navy vessel still in commission.

The naval base, which can accommodate the largest war ships, provides berths as given in the accompanying table

Portsmouth Berth Information				
Berth	Length	Depth		
South Railway Jetty	219m	10m		
Boat House Jetty	40m	10m		
Pitch House Jetty	70m	10m		
Sheery Jetty	64m	5m		
North Railway Jetty	37m	10m		
Middle Slip Jetty	396m	12m		
North Corner Jetty	183m	10m		
South West Wall	152m	8m		
South Wall	101m	8m		
North Wall	126m	8m		
North West Wall	259m	10m		
Fountain Lake Jetty	650m	6-8m		

Whale Island, occupied by a naval installation, lies 0.3 mile N of No.3 Basin and is connected to the shore at the E side by a causeway. A training vessel is moored alongside a jetty at the SW end of the island.

Haslar Lake, at the W side of the harbor, is entered close N of Fort Blockhouse. No. 1 Jetty, on the NE side of the lake, is fronted by a reserved area and has a maintained depth of 8.5m alongside. No. 2 Jetty, on the S side of the lake, has a maintained depth of 5m alongside. The W side of the lake has

facilities for pleasure craft and yachts. HMS Alliance is permanently berthed alongside a quay fronting the submarine museum, close W of No. 2 Jetty.

An oil fuel jetty, curving ESE and SSE, extends from the W side of the harbor, 0.6 mile N of Fort Blockhouse. The inner berth on the N side of the jetty has a depth of 9m alongside and the outer berth has a depth of 12m alongside. A marina fronts the shore close S of this jetty.

Fountain Lake, lying between the naval base and Whale Island, is the main commercial area of the port.

Flathouse Quay, at the SE end of the area, provides a berth, 190m long, with a depth of 7m alongside. It can accommodate vessels up to 156m in length and is used for reefer cargo.

Albert Johnson Quay, at the E end of the area, is 285m long and has a depth of 7m alongside. It can accommodate vessels up to 175m in length and is used for container, reefer, and general cargo.

Continental Ferry Port, a passenger and vehicular ro-ro terminal, is situated on the N side of the area. It provides four berths, 130 to 180m long, with depths of 5 to 7m alongside. Vessels up to 180m in length can be accommodated.

Aspect.—The city of Portsmouth, along with its suburbs, and the town of Southsea occupy the whole of the area known as Portsea Island at the E side of the harbor. The town of Gosport occupies most of the frontage at the W side of the harbor.

Southsea Castle (50°47.6'N., 1°05.3'W.), with its stone tower painted in prominent black and white bands, is situated at the S extremity of the land at the E side of the approach. A directional sector light is shown from the tower.

A number of prominent buildings stand within 0.4 mile of the castle and may best be seen on the chart.

Outer Spit Lighted Buoy (50°45.6'N., 1°05.5'W.) is moored about 1.1 miles S of Southsea Castle, at the entrance to the channel.

Fort Gilkicker (50°46.4'N., 1°08.5'W.) stands at the W side of the approach, 2 miles W of Southsea Castle. It is surmounted by a signal mast and marked by a light.



Fort Gilkicker

Spit Sand Fort (50°46.2'N., 1°05.9'W.), a prominent round stone structure, stands 0.6 mile SW of Southsea Castle and is marked by a light.

A conspicuous water tower, with an illuminated clock, is situated near the shore, 1.2 miles ENE of Southsea Castle.

Saint Jude's Church, with a conspicuous spire 45m high, stands 0.5 mile N of Southsea Castle.

Round Tower, marked by a light, stands at the E side of the harbor entrance, about 1 mile NW of Southsea Castle.

Saint Thomas Cathedral, with a prominent white cupola, stands about 0.2 mile E of Round Tower. Several large build-



Spit Sand Fort

ings stand on the E side of the harbor. The Paul Europe Building, 63m high and the tallest, is situated 0.5 mile N of the cathedral.

Fort Blockhouse, marked by a directional sector light, stands at the W side of the harbor entrance, about 0.1 mile W of Round Tower.

Holy Trinity Church, with a prominent tower 37m high, is situated 0.4 mile NW of Fort Blockhouse.

Two conspicuous apartment buildings, 51m and 48m high, stand on the W side of the harbor, close E of the church. A prominent white tower, 43m high, stands near the shore, 0.4 mile S of the church.

Naval War Memorial (50°47'N., 01°06'E.) is situated near the shore, 0.4 mile NW of Southsea Castle. It is 33m high, prominent, and stands on Southsea common overlooking the promenade. The memorial, which consists of a stone tower supported by four corner buttresses, commemorates the 24,589 names of the naval dead from both World Wars.



Naval War Memorial

Regulations.—For regulations concerning the approach to the harbor, see paragraph 2.21.

Fog routine will be declared by the Harbormaster when visibility is so low that shipping movements would be dangerous. When in effect, no vessels over 20m in length are permitted to move within the harbor or in the approach without the prior permission.

A speed limit of 10 knots is in effect for most of the port.

Large vessels operating in the port are to be given the precedence accorded to vessels constrained by their draft.

Merchant vessels, or other private vessels, must not navigate within 50m of any HM vessels, foreign warships, or auxiliary

vessels which are alongside or at anchor. Such vessels must also not navigate within 50m of any government facility/base or within 100m of any submarine which is alongside or at anchor.

Exclusion zones for warships underway may be activated by the Queen's Harbour Master (QHM). When in force, they will extend for 500m around the subject vessel or to the limits of navigable water if less. During activation, all vessels underway, except those involved in the escort or specifically authorized by the escort commander, are to remain clear of the zone.

An exclusion zone will be activated by direction from the QHM on VHF channel 11. It will be terminated on the subject vessel crossing the Dockyard Port boundary or when notified by the QHM on VHF channel 11 or by Southampton VTS on VHF channel 12.

During activation, Southampton VTS, on behalf of the QHM, will direct traffic within the Dockyard Port of Portsmouth to remain at least 500m clear of the subject vessel. If this is not possible, commercial traffic will be held until the warship is clear. During the harbor entry or exit phase, all small craft traffic will cease in the harbor entrance.

The warship, for which the exclusion zone is activated, will display two vertically-disposed diamond shapes by day or two horizontally-disposed flashing red lights at the masthead at night. All escorting vessels will show a blue flashing light by day and at night.

Mariners are cautioned that vessels in contravention of an exclusion zone, after being warned by at least two methods (radio, flashing light, or voice), will be deemed to have the intention of committing a hostile act against the warship being escorted.

Anchorage.—Man of War Anchorage Area, with depths of 5 to 24m, lies off the S end of Spit Sand, 1.3 miles SW of Southsea Castle. The limits of the area and the designated numbered berths may best be seen on the chart. Merchant vessels are prohibited from using this anchorage area without prior permission from the Harbormaster.

Caution.—A submarine cable area, which may best be seen on the chart, lies in the approach to the port and is centered about 2 miles S of Southsea Castle.

A ferry runs across the fairway about 0.3 mile N of Round Tower.

Care must be exercised in the vicinity of Fort Blockhouse at the harbor entrance due to traffic congestion, especially during the summer.

High-speed craft, including hovercraft, may be encountered in the vicinity of the port.

It is reported (1998) that some of the areas in the harbor maintained by dredging have depths less than charted. The Harbormaster should be contacted for the latest information.

A minelaying practice area, the limits of which may best be seen on the chart, lies centered 2.3 miles SW of Southsea Castle. Anchoring and fishing are prohibited within this area.

A restricted area, with a 300m radius, lies centered about 1 mile SW of Southsea Castle. The area, marked by a buoy, is the former position of the wreck of the Mary Rose which sunk in 1545 and was raised 1982. Several unlit buoys may be moored within the area and the depths may be less than charted.

Central Portion of The Solent

2.25 Ryde Middle (50°46'N., 1°14'W.) divides the E branch of The Solent into two channels, both equally used and easily navigated. This shoal has a least depth of 3.4m and is marked by lighted buoys. The tidal currents in the vicinity of Ryde Middle generally follow the direction of the channel, attaining maximum rates of about 2 knots.

2.26 Cowes Harbour (50°46'N., 1°18'W.) (World Port Index No. 35550), the principal port of the Isle of Wight, lies at the mouth of the River Medina and is entered from N. The river divides the harbor into East Cowes and West Cowes. Newport is situated about 3.5 miles above the river mouth. The port, used by commercial vessels, provides extensive facilities for pleasure craft and yachts.

Depths—Limitations.—The harbor has depths of 2 to 5m. The entrance fairway, marked by a lighted range and lighted buoys, lies at the W side of the mouth.

Medina Wharf, the longest commercial quay, lies at the W side of the river. It is 90m long and has a depth of 2m alongside. Generally, vessels up to 95m in length and 13.5m beam can be accommodated with drafts up to 5.3m at MHWS and 4.7m at MHWN. Vessels of greater length or beam will be considered on a individual basis after consultation with the Harbormaster Vessels up to 60m in length with drafts up to 2.9m at MHWS and 2.1m at MHWN can reach Newport.

Pilotage.—Pilotage is compulsory in the approaches to the River Medina for the following vessels:

- 1. All vessels of 48m or more in length.
- 2. All passenger ferries and passenger vessels of 20m or more in length when carrying more than 12 passengers.
- 3. Sub-standard commercial vessels as initially determined by master's report or Department of Transport survey.
- 4. Those vessels which lack the proper amended charts and equipment.
 - 5. Any vessel carrying dangerous substances.

Vessels requiring pilotage should send an ETA to the harbor office or agent at least 6 hours in advance.

The following arrangements have been made with the Southampton Harbour Authority:

- 1. Vessels of 61m or more in length on passage to or from Cowes or Cowes Anchorage are subject to compulsory pilotage within the inner limits of the Southampton Pilotage Area.
- 2. On request, Cowes Pilotage Authority will provide pilots to conduct vessels to and from the E or W limits of the Southampton Pilotage Area providing that a vessel is not on route to other locations within the area.

Cowes pilots may be contacted through the VTS Center, Southampton, and board, as follows:

- 1. Vessels between 61m and 150m in length carrying dangerous or polluting cargoes in bulk—within a boarding area bound by the following positions:
 - a. 50°43.77'N, 1°02.24'W.
 - b. 50°43.36'N, 1°03.10'W.
 - c. 50°42.82'N, 1°01.22'W.
 - d. 50°43.23'N, 1°00.37'W.

- 2. Vessels of 61m or more in length:
 - a. East approach—in 50°45.80'N, 1°09.00'W.
- b. West approach—in 50°45.43'N, 1°21.64'W. (about 0.7 mile W of Gurnard Ledge Lighted Buoy).

Regulations.—All commercial vessels and private recreational vessels of 30m or more in length are required to give notice of entry into, movement within, or departure from the harbor on VHF channel 69. The notification, consisting of vessel name, position, and intention, shall be given prior to departure from any berth and also when passing the following positions:

- 1. Inbound vessels—Fairway approaches, East Cowes Ferry Terminal, and Folly Inn.
- 2. Outbound vessels—Folly Inn, Kingston Wharf, and East Cowes Ferry Terminal.

Anchorage.—Cowes Roads, lying off the entrance to the river, provides anchorage, in depths of 9 to 15m. This road-stead is bound on the NW side by Prince Consort Shoal.

Caution.—All vessels entering or leaving the harbor must keep a good lookout for high speed craft including hydrofoils and catamarans on regular service. Such vessels, which may enter and leave the fairway at speeds in excess of 6 knots, will exhibit a quick flashing yellow light.

Local knowledge is advised for entry.

Southampton (50°54'N., 1°24'W.)

World Port Index No. 35580

2.27 The Port of Southampton is situated at the head of a 5-mile long inlet known as Southampton Water. It is located at the junction of the River Test and the River Itchen and is one of the principal ports in England.

Winds—Weather

During the day the sea breeze either blows from the SW up the W branch of The Solent or from the SE up Spithead and Southampton Water. The land breeze, which blows on clear nights throughout the year, generally is from the NW and comes down Southampton Water fairly steadily, but here it usually is light.

Gales from the SW occur on occasion in winter and close down Needles Channel, but the Nab approach is usually always open.

Fog occurs on the average of 4 or 5 days a month in winter, but is rare during the summer season. Morning radiation type fog is more common on calm winter nights and usually clears fairly early in the day.

Tides—Currents

The tides rise about 4.5m at MHWS and 3.7m at MHWN. In Southampton Water the unusual phenomenon of double HW occurs. The flood current and HW period have a duration of about 9 hours. The ebb current has a duration of only about 3 hours 30 minutes.

There is also a local phenomena called "Young Flood Stand." This stand of the tide starts about 2 hours after LW at Southampton with a rise of about 1.9m. It is of considerable benefit for handling large vessels at other than HW.

Tidal currents generally follow the channels in Southampton Water except at the S end, where they become confused over Bramble Bank. The currents, at springs, attain rates of 2.5 knots near the entrance of Southampton Water and 1.7 knots close below the port facilities.



Southampton Docks

Depths—Limitations

Western Approach Channel lies in the vicinity of the junction of the W Solent and the E Solent. Thorn Channel and Calshot Reach lead in a N direction into Southampton Water from The Solent.

The fairway is dredged to a depth of 12.6m through Thorn Channel, Calshot Reach, and the River Test, as far as the main container terminal. The area leading through the River Itchen to Eastern Docks and Empress Docks is dredged to a depth of 9.1m.

The River Hamble, with extensive yachting facilities, flows into the NE side of Southampton Water, 1 mile N of Calshot Castle.

A shipyard, with a large covered berth, is situated at Woolston, at the E side of the River Itchen, 0.8 mile above the mouth. A bridge spans the river close above this shipyard. The upper part of the river, above the bridge, provides facilities for yachts and pleasure craft.

A prominent marina, with residences, is situated on the S side of the River Test, about 0.6 mile SW of the entrance to the River Itchen. It is entered via a small lock. A base, leased to the US Department of Defense, is situated 0.5 mile SE of the marina and fronted by Admiralty Jetty. A ro-ro dolphin berth and several mooring buoys are situated near the head of this jetty.

Marchwood Military Port lies on the S side of the River Test, 2 miles NW of Admiralty Jetty, and is fronted by three piers. These piers provide six berths, including a ro-ro facility. The area leading from the main fairway to the piers is dredged to a depth of 8m.

King George V drydock is situated at the W end of Western Docks. It is 365m long, 40.4m wide, and has a depth of 11m over the sill. This drydock can accommodate vessels up to 90,000 dwt, 350m in length, 39.5m beam, and 11m draft.

Town Quay, fronting the River Test, is situated close W of Eastern Docks. Berths for small automobile, passenger, and high speed ferries are situated in the vicinity of this quay.

Berths.—Fawley Marine Terminal (Esso Marine Terminal) is situated 1.5 miles NW of Calshot Castle. The terminal quay, 0.7 mile long, is connected to the shore by two piers. It provides five ocean berths on the outer face and four coastal berths on the inner face. The ocean berths are 213 to 366m long with depths of 10.2 to 14.9m alongside.

There are facilities for oil, liquefied gas, and chemical tankers. Partly-loaded VLCCs can be handled. Vessels up to 421,680 dwt, 378m in length, and 14.9m draft have been accommodated at the terminal.

BP Hamble Oil Terminal is situated on the N side of the channel, 0.5 mile NW of the entrance to the River Hamble. It consists of a jetty head, with one berth, connected to the shore by a ramp, 450m long. The berth has a depth of 13.6m along-side. Vessels up to 110,000 dwt, 260m in length, and 13.1m draft can be handled.

Eastern Docks lie at the junction of the rivers and consist of Ocean Dock, Empress Dock, Itchen Quay, and Test Quay. Empress Dock and Itchen Quay face E toward the River Itchen. Ocean Dock and Test Quay face S toward the River Test. An area dredged to a depth of 10.2m leads from the main fairway to Eastern Docks. The entrance to Ocean Dock basin is 121.9m wide. The entrance to Empress Dock basin is 48.5m wide.

Western Docks front the N side of the River Test to the W of Eastern Docks. There are facilities for ro-ro, reefer, cruise, bulk, and general cargo vessels.

Southampton Container Terminal is situated W of Western Docks. Vessels up to 15m draft can be accommodated along-side this terminal at HW.

The main cargo facilities are listed in the table below.

Southampton Berth Information					
Dock	Berth	Depth	Length		
Southampton (Prince Charles) Container Terminal					
	207	15.0m	420m		
	206	13.6m	310m		
	204-205	12.8m	620m		
Western Docks					
Cable Ship Berth	203	9.1m	274m		
	202	12.1m	274m		
Vehicle Berth	201	10.2m	280m		
	107-109	11.7m	620m		
Cruise Ship Terminal	105-106	11.7m	525m		
Fruit Terminal	101-104	10.2m	1,118m		
Eastern Docks					
Ocean Dock Basin	43-44-47	11.7m	692m		
	45-46	10.2m	431m		

Southampton Berth Information					
Dock	Berth	Depth	Length		
	48-49	7.1m	226m		
Test Quays	41	8.7m	172m		
	40	9.3m	148m		
Test Quays (passenger)	38-39	10.5m	360m		
Dock Head	37	7.8m	143m		
Empress Dock Basin	20-21	7.5m	258m		
	22-23	6.8m	234m		
	24-27	7.2m	502m		
Itchen Quays	29	5.6m	106m		
	34-36	9.9m	484m		
	30-33	9.1m	263m		
	34-36	9.9m	484m		

Aspect

Calshot Castle and a radar tower, 34m high, are situated on the W entrance point of Southampton Water and are prominent. A house, with a conspicuous red roof, stands near the shore, 1.7 miles ENE of the castle. Luttrell Tower, with a flagstaff, stands 1.1 miles SW of the castle and is conspicuous.

West Bramble Lighted Buoy, equipped with a racon, is moored at the SW extremity of Bramble Bank, 2 miles S of Calshot Castle.

A very conspicuous chimney, 198m high, stands in the vicinity of a power station, 0.8 mile W of Calshot Castle. Numerous tanks, flares, and chimneys are situated near the marine oil terminal, 1.2 miles NW of the power station.

A conspicuous silo, 53m high, stands on the S extremity of Eastern Docks at the W entrance point of the River Itchen. The VTS Center, with a prominent framework mast, is situated close W of the silo.

A prominent radar scanner is situated on Admiralty Jetty, about 0.9 mile S of the silo. A conspicuous building, 70m high, stands about 1.1 miles E of the silo. Five prominent blocks of apartments are situated close NW of this building.

Regulations

A Precautionary Area has been established in Thorn Channel and may best be seen on the chart.

All vessels over 150m in length while navigating within this Precautionary Area will be given a Moving Prohibited Zone around the vessel of 1,000m ahead and 100m either side of the vessel. Small vessels under 20m in length are prohibited from entering the Moving Prohibited Zone.

All vessels of over 150m in length when navigating in the area are required to display, where it can best be seen, a black cylinder by day and three all round red lights in a vertical line at night to indicate visually the presence of the Moving Prohibited Zone ahead and either side of the vessel.



Southampton—Queen Elizabeth II Terminal



Southampton Container Terminal

When operationally possible, such vessels will be preceded by the Southampton harbor patrol launch showing, in addition to normal steaming lights, a blue flashing light.

The Southampton VTS Center makes hourly broadcasts on VHF channel 12 giving information on Moving Prohibited Zones in operation in the Precautionary Area.

Vessels under 20m in length are prohibited from entering the channel between West Bramble Lighted Buoy (50°47.2'N., 1°18.7'W.) and Hook Lighted Buoy (50°49.5'N., 1°18.3'W.), when vessels over 100m in length are navigating in the main channel.

Speed restrictions are in effect for various portions of the harbor. The pilot should be consulted for details.

All tankers over 60,000 dwt, bound to or from Fawley Marine Terminal, are required to take the services of an escort tug from S of the Nab Tower to the berth.

It is reported that VLCCs are not permitted to enter Thorn Channel on the flood tide when the wind is between W and SW and in excess of 30 knots.

Special regulations apply to gas tankers entering the port.

Gas tankers in transit within The Solent may not enter any areas where the visibility is less than 0.5 mile.

Gas tankers navigating between West Bramble Lighted Buoy and Hook Lighted Buoy shall be given sole occupancy of the channel.

No vessel may anchor closer to a gas tanker than twice their combined lengths and at no time will more than three gas tankers be permitted to anchor within the designated Controlled Anchorage Area (See Anchorage).

No gas tankers exceeding 8,000 cubic meters or 6,000 grt are permitted to enter or leave the port via the W solent.

See paragraph 2.21 for regulations concerning the approach to The Solent.

Signals

Traffic signals are shown from a mast at the VTS Center at the S extremity of Eastern Docks. The signals displayed on the E side of the mast apply to the docks fronting the River Itchen, while the signals on the W side apply to those fronting the River Test. The day signals consist of colored semaphore-type boards. The night signals consist of lights.

The signals are, as follows:

- 1. A green board indicates a vessel may enter or leave the dock with great caution.
 - 2. A red board indicates entry or departure is forbidden.
- 3. A red board over a green board indicates entry or any movement in the docks is forbidden in order to facilitate the departure of a vessel.
- 4. A green board over a red board indicates departure or any movement in the docks is forbidden in order to facilitate the entry of a vessel.

Anchorage

A Controlled Anchorage Area, the limits of which may best be seen on the chart, extends for 2 miles above Calshot Castle. No vessel may anchor in the area without previous permission from the VTS Center.

Vessels over 91.4m in length must anchor in the berths designated No. 1, No. 2, and No. 3, which are indicated on the chart.

Smaller vessels may, with prior permission, anchor in an area on the E side of Calshot Reach. This area lies centered 0.5 mile NNE of Calshot Castle and has depths of 5 to 6m.

A submarine pipeline crosses the channel close N of the oil terminal. An area within which anchoring and fishing are prohibited lies in the vicinity of the pipeline and may best be seen on the chart.

Caution

Large commercial vessels from E making the turn into Thorn Channel, after passing N of Prince Consort Lighted Buoy, may pass close N of Gurnard Lighted Buoy (50°46.2'N., 1°18.8'W.) before altering course to starboard to enter the channel WNW of West Bramble Lighted Buoy. Such vessels may be encountered anywhere in the Precautionary Area.

Radar Reference Lines, shown on the chart, are used to indicate the position of a vessel by the Harbour Radar Control. Dots are shown along the line at intervals of o.1 mile with circles where the line changes direction. A vessel underway in the radar coverage area will at any time, on request by VHF to the VTS Center, be given its position relative to the line, or, where the line is not shown, relative to navigational landmarks.

The Solent to Selsey Bill

2.28 The mainland shore between The E part of Portsmouth and Selsey Bill, 10 miles ESE, is low-lying. It is backed by a range of chalk hills about 10 miles inland. The coast, which is fronted by an area of shallow sands, consists of an extensive inlet occupied by Portsea Island, Hayling Island, and Thorney Island. These islands are intersected by Langstone Harbour and Chichester Harbour.

Langstone Harbour (50°47'N., 1°02'W.) is entered between two drying flats known as East Winner, formed of sand, and West Winner, formed of gravel. The bar at the entrance has a least depth of 1.8m and local knowledge is required. This inlet is used only by pleasure craft and yachts. The harbor may be contacted by VHF and pilots are available from Portsmouth.

Chichester Harbour (50°47'N., 0°56'W.) is low, marshy, and encumbered with shoals. The bar at the entrance lies between West Pole and Middle Pole, two drying sandbanks. It is normally dredged to a depth of 1.5m. However, shoaling often occurs after strong winds and depths over the bar may vary by up to 0.8m. Local knowledge is essential. The inlet is used only by pleasure craft and yachts. Formal pilotage services are not available, although masters of large craft may obtain advice by VHF from the Harbormaster's office. A prominent brick tower, in ruins, stands near the shore, about 1.4 miles ESE of the entrance to this inlet.

2.29 Selsey Bill (50°43'N., 0°47'W.), fronted by dangerous shoals, appears from E and W as a low, sharp point. The tower of the coast guard station, situated 0.7 mile NW of the point, is conspicuous from seaward.

Several buildings stand on the point and are reported to be radar prominent, but difficult to identify. The spire of Chichester Cathedral, standing about 7 miles N of the point, is reported to be conspicuous from seaward.

The Owers (50°42'N., 0°44'W.) is the collective name for the areas of foul ground and rocky shoal patches fronting Selsey Bill. These dangers, which may best be seen on the chart, extend up to about 3 miles S, 6 miles SE, and 4 miles E of the point.

The Looe, a channel with depths of 6 to 7m, leads between the dangers fronting Selsey Bill. It is used only by small vessels. Passage should be only attempted during daylight and in clear weather. Local knowledge is advised. Buoys indicating the channel cannot be relied on and the leading marks are difficult to identify.

Owers Lighted Buoy (50°39'N., 0°41'W.), moored about 6 miles SE of Selsey Bill, marks the SE extremity of these dangers. It is equipped with a racon.

Vessels are recommended to pass clear to the S of this lighted buoy before changing course toward the E entrance of The Solent.